

REMARKS

Summary

Claims 1-45 stand in this application. Claims 1, 11, 13, 16, 20, 23-30, 33-35 and 39 have been amended. Claims 12, 17-19, 21, 22, 31, 32, 36-38 and 40-45 have been withdrawn. No new matter has been added. Favorable reconsideration and allowance of the standing claims are respectfully requested.

35 U.S.C. § 102

At page 2 of the Office Action claims 43-45 stand rejected under 35 U.S.C. § 102 as being anticipated by United States Patent Number (USPN) 6,646,615 to Andrews et al. ("Andrews"). Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the anticipation rejection.

Applicant respectfully submits that claims 43-45 have been withdrawn from consideration, without prejudice, rendering such rejection moot.

35 U.S.C. § 103

At page 4, paragraph 2 of the Office Action claims 1-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USPN 5,940,452 to Rich ("Rich") in view of Andrews. Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the obviousness rejection.

The Office Action has failed to meet its burden of establishing a *prima facie* case of obviousness. According to MPEP § 2143, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation,

either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

As recited above, to form a *prima facie* case of obviousness under 35 U.S.C § 103(a) the cited references, when combined, must teach or suggest every element of the claim. See MPEP § 2143.03, for example. Applicant respectfully submits that the Office Action has not established a *prima facie* case of obviousness because the cited references, taken alone or in combination, fail to teach or suggest every element recited in claims 1-42. Therefore claims 1-42 define over Rich and Andrews whether taken alone or in combination.

Applicant respectfully submits that certain of the claims have been amended to more clearly distinguish the claimed invention over that of the cited references. In particular, Applicant has amended claims 1, 11, 20, 30 and 39 to more clearly claim a mobile communications device endowed with a single antennae structure composed of a plurality of electric dipole antennae and a plurality of magnetic dipole antennae to introduce an associated (N+M) plurality of uncorrelated spatial streams into either the transmit and/or receive communication paths. To make the most use of such independent, uncorrelated spatial streams, the referenced claims also include an element

of signaling to enable the receiving station to beneficially receive and process such signals.

In contrast, Applicant respectfully submits that neither Rich nor Andrews disclose or suggest the use of multiple electric dipole antennae and magnetic dipole antennae disposed in a common antennae structure on a mobile communications device to merely introduce multiple, uncorrelated spatial channels. Rather, the Office Action relies on citations from Rich wherein a BTS may support multiple (electric dipole) antennae to introduce simple diversity. Neither reference provides support for the claimed signaling to implement the multiple spatial channels.

Moreover, Applicant respectfully submits that to introduce the antennae structure of Andrews onto a mobile communications device of Rich would render the Rich device inoperable. For example, in a receive operation, the multiple antennae generate a commensurate number of uncorrelated spatial streams from the received signal(s). In response, the receiver of the mobile communications device must independently process each of these spatial streams prior to a combining operation. Applicant respectfully submits that the Rich reference fails to disclose or suggest a receiver in the mobile communications device capable of such receive processing. Thus, the proposed combination would not function in accordance with the claimed device.

For at least the reasons given above, claims 1, 11, 20, 30 and 39 are non-obvious and represent patentable subject matter in view of the cited references, whether taken alone or in combination. Accordingly, removal of the obviousness rejection with respect to claims 1, 11, 20, 30 and 39 is respectfully requested.

Furthermore, if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. *See* MPEP § 2143.03, for example. Accordingly, removal of the obviousness rejection with respect to claims 1, 11, 20, 30 and 39 is respectfully requested. Claims 2-11, 13-16, 23-29 and 31-35 also are non-obvious and patentable over Rich and Andrews, taken alone or in combination, at least on the basis of their dependency from claims 1, 11, 20 and 30 respectively. Applicant, therefore, respectfully requests the removal of the obviousness rejection with respect to these dependent claims.

Conclusion

For at least the above reasons, Applicant submits that claims 1-11, 13-16, 20, 23-30, 33-35 and 39 recite novel features not shown by the cited references. Further, Applicant submits that the above-recited novel features provide new and unexpected results not recognized by the cited references. Accordingly, Applicant submits that the claims are not anticipated nor rendered obvious in view of the cited references.

Applicant does not otherwise concede, however, the correctness of the Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicant hereby reserves the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited references, taken alone or in combination, based on additional features contained in the dependent claims that were not discussed above. A detailed discussion of these differences is believed to be unnecessary at this time in view of the basic differences in the independent claims pointed out above.

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TC/A.U. 2683

It is believed that claims 1-11, 13-16, 20, 23-30, 33-35 and 39 are in allowable form. Accordingly, a timely Notice of Allowance to this effect is earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present patent application.

Respectfully submitted,

KACVINSKY LLC

A handwritten signature in black ink, appearing to read 'John F. Kacvinsky', with a horizontal line extending to the right.

John F. Kacvinsky, Reg. No. 40,040
Under 37 CFR 1.34(a)

Dated: July 18, 2007

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